

"We claim"

1.

A method of

~~The use of the procedure for the testing of documents using the capacitive coupling between the transmitter and the receiver and the transmission of energy between the transmitter and the receiver by electrically conductive safety materials according to patent application DE 197 18 916.4, in which for the counterfeit test of documents the~~  
5 electric conductivity of at least one safety element with a specific electric coding of  
6 information by means of beam-shaped, latticed, curved and/or circular structures of an electrically conductive ink, where the line width of the smallest testable electrically conductive structure is  $\leq 5$  mm, is determined and evaluated by means of a reference  
7 signal image comparison.

2.

<sup>method</sup>  
The ~~use of the procedure~~ according to claim 1 in which for the counterfeit test of documents

- of at least one safety element with a specific electric coding of information by means of beam-shaped, latticed, curved and/or circular structures of an electrically conductive ink, where the line width of the smallest testable electrically conductive structure is  $\leq 5$  mm, and

- at least one diffraction-optically effective safety element with a specific electric coding of information by means of beam-shaped, latticed, curved and/or circular metallized structures with steep edges to adjacent non-metallized structures, where the line width of the smallest testable metallized structure is  $\leq 5$  mm,

the electric conductivity is determined and evaluated by means of a reference signal image comparison.

3.

*a* *method of*  
The ~~use of the procedure according to claim 1 in which~~ for the counterfeit test of documents

- of at least one safety element with a specific electric coding of information by means of beam-shaped, latticed, curved and/or circular structures of an electrically conductive ink, where the line width of the smallest testable structure is  $\leq 5$  mm, and

- of diffraction-optically effective safety layers with a discontinuous metallizing layer or partially metallic layers or zones of metallic layers at different levels

the electric conductivity is determined and evaluated by means of a reference signal image comparison.

4.

*method of claim 1*  
The ~~use of the procedure according to one or several of the above claims in which~~ in top view a structure of an electrically conductive ink has the shape of a meander the electric conductivity of which is determined and evaluated by means of a reference signal image comparison.

5.

*method of claim 1*  
The ~~use of the procedure according to one or several of the above claims in which~~ strip-shaped structures of an electrically conductive ink are arranged in parallel and isolated to each other, where in top view the strip-shaped zones run parallel or vertically to the document transport direction, the electric conductivity of which is determined and evaluated by means of a reference signal image comparison.

6.

*method of Claim 1*

*a* The ~~use of the procedure according to one or several of the above claims~~ in which different electrically conductive inks within a safety element have different conductivities which are determined and evaluated by means of a reference signal image comparison.

7.

*method of Claim 1*

The ~~use of the procedure according to one or several of the above claims~~ in which at least two structures within a safety feature have different ink thicknesses the electric conductivity of which is determined and evaluated by means of a reference signal image comparison.

8.

*method of Claim 1*

The ~~use of the procedure according to one or several of the above claims~~ in which the width of an electrically conductive structure with a constant electric conductivity corresponds to the width of at least two electrodes the electric conductivity of which is determined and evaluated by means of a reference signal image comparison.

9.

*method of Claim 1*

The ~~use of the procedure according to one or several of the above claims~~ in which the electric conductivity of two structures having the same and/or a different electric conductivity with a distance of at least 0.1 mm is determined and evaluated by means of a reference signal image comparison.

10.

*method of claim 1*

*a* The ~~use of the procedure according to one or several of the above claims in which~~ the electric conductivity of a structure of electrically conductive ink layers at different levels is determined and evaluated by means of a reference signal image comparison.

11.

*method of claim 1*

The ~~use of the procedure according to one or several of the above claims in which~~ the electric conductivity of structures of an electrically conductive ink which are arranged within structures of an electrically conductive ink is determined and evaluated by means of a reference signal image comparison.

12.

*method of claim 1*

The ~~use of the procedure according to one or several of the above claims in which~~ the electric conductivity of at least two structures of different electric conductivity is separately determined and evaluated by means of a reference signal image comparison.

13.

A method of

~~The use of the procedure for the testing of documents using the capacitive coupling between the transmitter and the receiver and the transmission of energy between the transmitter and the receiver by electrically conductive safety materials according to patent application DE 197 18 946.4 in which the electrically conductive structures are tested in size, shape, number, tint, spacing to each other and conductivity on documents to be tested in this way, where~~

- at least one of the electrically conductive structures is tested by a scanner (33) designed as a manual device by a group of persons A,
- at least two of the electrically conductive structures are tested by a scanner (34) equipped with a special software and installed in a high-speed handling machine by a small defined group of persons B,
- at least three of the electrically conductive structures are tested by a scanner (35) equipped with a highly-specialized software and installed in a high-speed handling machine by a very small defined group of persons C and the electrically conductive structures represent codings which are visually perceptible by group A, visually and via decoding by means of the software by group B and by the group of persons C mainly by decodings by means of the software not accessible to group A and B.